CLAIMS

What is claimed is:

1. An anti-vibration method applied in a rotating disk of an image display system for eliminating unbalance of the rotating disk, comprising steps of:

forming a holder on the rotating disk;

filling a selected amount of a curable fluid and a plurality of spheres in the holder;

rotating the rotating disk until the rotating disk reaching balance; and

curing the curable fluid.

2. The anti-vibration method of claim 1, wherein the holder is formed by an annular element or a bowl bonding to the rotating disk.

3. The anti-vibration method of claim 2, wherein the annular element or the bowl is bonded by a means selected from a group consisting of adhering, screwing, latching and coupling.

4. The anti-vibration method of claim 1, wherein the curing of the curable fluid is selected from a group of approaches consisting of providing photo energy, providing thermal energy and providing catalysts.

5. The anti-vibration method of claim 4, wherein the curable fluid is selected from a group of fluid consisting of a photosensitive curable fluid, a thermal sensitive curable fluid and a double agent curable gel.

6. The anti-vibration method of claim 1, wherein the holder and the rotating disk are coaxial.

7. The anti-vibration method of claim 1 further comprising a step of:

measuring an unbalance amount of the rotating disk by a measuring device for selecting a predetermined amount of the

spheres to be placed within the holder of the rotating disk.

8. An anti-vibration apparatus applied in a rotating disk of an image display system for eliminating unbalance of the rotating disk , comprising:

a motor for providing rotation power;

a spindle housed in the motor and coupled with the rotating disk for transmitting the rotation power to drive the rotating disk;

a holder formed on the rotating disk;

a curable fluid contained in the holder; and

a predetermined amount of spheres placed in the holder;

wherein when the motor drives the rotating disk to rotate, the fluid and the spheres filled within the holder of the rotating disk are naturally flowed to the periphery side of the holder under a vibration force and distributed in such a way to balance the rotating disk, and the fluid is then cured after the balance of the rotating disk is attained.

9. The anti-vibration apparatus of claim 8, wherein the holder is formed by an annular element or a bowl bonding to the rotating disk.

10. The anti-vibration apparatus of claim 9, wherein the annular element or the bowl is bonded by a means selected from a group consisting of adhering, screwing, latching and coupling.

11. The anti-vibration apparatus of claim 8, wherein the curable fluid is selected from a group of fluid consisting of a photosensitive curable fluid, a thermal sensitive curable fluid and a double agent curable gel.

12. The anti-vibration apparatus of claim 8, wherein the holder has a flange located on a top end of a side wall thereof and extended inwards.

13. The anti-vibration apparatus of claim 8, wherein the holder and the rotating disk are coaxial.

14. The anti-vibration apparatus of claim 8, wherein the sphere is made of metal.

15. The anti-vibration apparatus of claim 8, wherein the sphere is made of metalloid.

16. A color wheel module applied in an image display system for modulating the color of an incident light, comprising:

a motor for providing rotation power;

a disc-shaped color filter disk with a plurality of thin film color filters being driven to rotate by the motor for alternately modulating the color of the incident light;

a holder formed on inner periphery of the disc-shaped color filter disk;

a curable fluid contained in the holder; and

a plurality of spheres placed in the holder;

wherein when the motor drives the disc-shaped color filter disk to rotate, the fluid and the spheres filled within the holder of the color wheel are naturally flowed to the periphery side of the holder under a vibration force and distributed in such a way to balance the disc-shaped color filter disk, and the fluid is then cured after the balance of the color wheel module is attained.

17. The color wheel module of claim 16, wherein the holder is

formed by an annular element or a bowl bonding to the color wheel module.

18. The color wheel module of claim 17, wherein the annular element or the bowl is bonded by a means selected from a group consisting of adhering, screwing, latching and coupling.

19. The color wheel module of claim 16, wherein the curable fluid is selected from a group of fluid consisting of a photosensitive curable fluid, a thermal sensitive curable fluid and a double agent curable gel.

20. The color wheel module of claim 16, wherein the holder has a flange located on a top end of a side wall thereof and extended inwards.

21. The color wheel module of claim 16, wherein the holder and the color wheel are coaxial.

22. The color wheel module of claim 16, wherein the sphere is made of metal.

23. The color wheel module of claim 16, wherein the sphere is made of metalloid.